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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,193	08/22/2005	Caiguo Gong	2002B093	5600

23455 7590 07/13/2010
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EXAMINER

NERANGIS, VICKIE MARIE

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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07/13/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/518,193

Applicant(s)

GONG ET AL.

Examiner

Vickey Nerangis

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,8,10,11,13,16,19,20,22,23,27,29,34-37,39,42,45 and 72-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,8,10,11,13,16,19,20,22,23,27,29,34-37,39,42,45 and 72-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-646)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. All outstanding rejections, except for those maintained below, are withdrawn in light of applicant's amendment filed on 4/20/2010.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 4/20/2010. In particular, claims 1 and 22 have been amended to include improper Markush language. Thus, the following action is properly made final.

Claim Rejections - 35 USC § 112

4. Claims 1, 5, 8, 10, 11, 13, 16, 19, 20, 22, 23, 27, 29, 34-37, 39, 42, 45, and 72-76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1 and 22, the claims appear to improperly recite a Markush group. Consequently, it is impossible to determine which elements of the group are required by the claims. When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if "wherein R is a material selected from the group consisting of A, B, C and D" is a proper limitation, then "wherein R is A, B, C or D" shall also be considered proper (emphasis added). See MPEP § 2173.05(h). Note that nested alternative groups within Markush language must also adhere to proper Markush language. For instance, language "R² and R^{2'}" are the same or different and are selected from the group consisting of hydrogen, C₁ to C₂₀ alkyls, alkenyls and aryls..."

(underlining added for emphasis) is incorrect as the phrase "C₁ to C₂₀ alkyls, alkenyls and aryls" is also an alternative expression which should have "and" substituted with "or." Similarly, the description of substituted C₁ to C₂₀ alkyls, alkenyls, and aryls should also be amended to recite "or."

With respect to claims 5, 8, 10, 11, 13, 16, 19, 20, 23, 27, 29, 34-37, 39, 42, 45, and 7—76, they are rejected for being dependent on a rejected claim.

Claim Rejections - 35 USC § 103

5. Claims 1, 5, 8, 10, 11, 13, 16, 19, 20, 22, 23, 27, 29, 34-37, 39, 42, 45, and 72-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arjunan (US 5,700,871) in view of Elpass (US 5,807,629).

The rejection is adequately set forth in paragraph 8 of Office action mailed on 1/20/2010 and is incorporated here by reference.

Response to Arguments

6. Applicant's arguments filed 4/20/2010 have been fully considered but they are not persuasive. Specifically, applicant argues that one of ordinary skill in the art would be concerned that the addition of the amine-modified clay would disrupt the dispersion of Arjunan and therefore the combination of Arjunan with Elpass cannot be done with a reasonably expectation of success.

In response, Arjunan teaches the addition of amine compounds (see col. 7, line 34; col. 8, line 8) with no indication of how an amine could affect the dispersion of the compatibilized

elastomeric composition. Therefore, one of ordinary skill in the art would have no reasons to suspect that the amine in the amine-modified clay of Elpass would affect the dispersion of the blend taught by Arjunan.

Furthermore, the amines of Elpass are stably reacted with the layered clay minerals and would not readily react with the blend components of Arjunan.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Nerangis whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

vn

/Vickey Nerangis/
Primary Examiner, Art Unit 1796